

*With the Compliments of the Medical Officer
of Health.*

SOUTHAMPTON
URBAN SANITARY AUTHORITY



THE 27th
ANNUAL REPORT
ON THE
VITAL STATISTICS AND SANITARY
CONDITION
OF THE
County Borough of Southampton,
FOR THE YEAR 1900,

BY

A. WELLESLEY HARRIS,

M.R.C.S. Eng., L.S.A., D.P.H., &c.,

*Medical Officer of Health to the Borough and Port of Southampton, Medical Officer
to the Southampton Fever Hospital.*

Fellow of the British Institute of Public Health;

Fellow of the Epidemiological Society; Fellow of the Sanitary Institute, &c.

SOUTHAMPTON :

PRINTED BY HENRY KING, HANTS ADVERTISER COMPANY, LIMITED.

MDCCCXI.

By the order of the Local Government Board, dated March 23rd, 1891, Article 18, Section 14, it is prescribed that the Medical Officer of Health shall “prepare an Annual
“Report to be made to the end of December in each year,
“comprising a summary of the action taken during the
“year for preventing the spread of disease, and an account
“of the sanitary state of his district generally at the end of
“the year. The report shall also contain an account of
“the enquiries which he has made as to conditions
“injurious to health existing in his district, and of the
“proceedings in which he has taken part or advised under
“the Public Health Act, 1875, so far as such proceedings
“relate to those conditions; and also an account of the
“supervision exercised by him, or on his advice, for
“sanitary purposes over places and houses that Sanitary
“Authorities have power to regulate, with the nature and
“results of any proceedings which may have been so
“required and taken in respect of the same during the
“year. It shall also record the action taken by him, or
“on his advice, during the year in regard to offensive
“trades and to factories and workshops. The report shall
“also contain Tabular Statements (on forms to be
“supplied by the Local Government Board, or to the like
“effect) of the sickness and mortality within the district,
“classified according to diseases, ages, and localities.”

MUNICIPAL OFFICES,
SOUTHAMPTON,
July, 1901.

TO THE MAYOR, ALDERMEN, AND COUNCILLORS OF THE
COUNTY BOROUGH OF SOUTHAMPTON.

GENTLEMEN,

I have the honour to present to you the Twenty-Seventh Annual Report of the Medical Officer of Health for the year ending December 31st, 1900, in accordance with the requirements of the Local Government Board.

The Death Rate for the year amounted to 17.6 per thousand for the entire Borough, compared with 19.1 per thousand in the previous year.

This lowered Death Rate is highly satisfactory, and is due in a great measure to a reduced incidence of Zymotic diseases, and consequently a lowered Zymotic Death Rate compared with the year 1899.

The absence of prolonged great heat in the Autumn of 1900 must be considered an element in the reduction of the Zymotic Diseases so prevalent in 1899. The provision of Hospital accommodation for Infectious Diseases supplied by the new Isolation Hospital, has, also in my opinion, contributed largely in reducing the extension of Infectious disease and its consequent mortality.

With regard to the drainage of the lower portions of the town referred to in my last Annual and other Reports, your Council decided to obtain expert opinion, and Mr. W. C. Tyndale, having been provided with all the Reports on the subject, made a careful investigation, and submitted an opinion to you on August 3rd, 1900. His report endorsed the opinion which I had previously laid before you.

I am, Gentlemen,

Yours faithfully,

A. WELLESLEY HARRIS,

Medical Officer of Health.

STATISTICAL.

POPULATION.

The population of the County Borough of Southampton estimated to the middle of 1900, amounts to 103,500 persons, viz :—

ESTIMATED POPULATION, 1900.

Town Proper	...	...	...	...	61,250
Portswood and Bitterne Park...	...	...	...	...	17,500
Shirley, Freemantle, and Millbrook	...	...	...	...	24,750
					<hr/>
					103,500
					<hr/>

These totals have been revised in accordance with the return received from the Registrar General of the result of the Census taken on April 1st, 1901, as follows :—

CENSUS POPULATION April 1st, 1901.

(Subject to Revision).

Town Proper	...	...	...	...	61,409
Portswood and Bitterne Park...	...	...	...	...	17,957
Shirley, Freemantle, and Millbrook	...	...	...	...	25,545
					<hr/>
					104,911
					<hr/>

The result of the Census shows that the population of the Borough has been slightly overestimated for the past five years. This error arose almost entirely in calculating the population of the Town Proper.

The Census figures for 1901 show that the population per house in the Town is less than that recorded in 1891, the reverse of what was anticipated.

The following table shows the difference between the estimated population and the actual census figures in April, 1901.

	Estimated.	Actual.		
Town Proper ...	64,436	61,409	overestimated	3,027
Portswood and } Bitterne Park }	18,210	17,957	ditto	253
Shirley, Free- } mantle, and } Millbrook }	25,067	25,545	underestimated	478
	<hr/>	<hr/>		
	107,713	104,911	difference	2,802
	<hr/>	<hr/>		

The per centage of increase occurring in the decennial period varies considerably in the various districts, being lowest in the Town and highest in Portswood. This variation is due to their being no available land for building purposes in the Town districts, and the development of the outlying portions of the Borough.

INCREASE OF POPULATION 1891=1901.

	Increase, 1891-1901.	Increase Per Cent. on Population, 1891.
Whole Borough ...	22,785	27.7
Town Proper ...	5,946	10.7
Portswood and Bitterne } Park ... }	7,645	74.1
Shirley, Freemantle, and } Millbrook ... }	9,194	56.2

The difference between the actual and estimated population has necessitated a revision of the Birth and Death Rates for the past ten years, and shows the desirability of a quinquennial census.

BIRTHS.

The total number of Births registered within the Borough during the year numbered 2,929—1,477 of which were males and 1,452 females—giving a Birth Rate for the entire Borough of 28·3, compared with 30·7 the average for the past 20 years in Southampton, and 31·0 the average for England and Wales during a similar period (see Table 5 in Appendix).

DEATHS.

The total number of Deaths from all causes registered during the year amounted to 1,881, of which 990 were males and 891 females, giving a Death Rate of 17·6 per thousand for the entire Borough, compared with 19·1 in the previous year, and 18·3 for England and Wales.

If we allocate the Deaths occurring in the three principal divisions of the Borough, we have a Death Rate in each as follows :—

Town Proper	20·36	} per thousand of the population.
Portswood and Bitterne Park	...	...	...	12·97
Shirley, Freemantle, and Millbrook	...	...	...	13·99

An increased Death Rate in the Town Proper over other Districts is due, to a great extent, to the age distribution, the greater crowding on space of the inhabitants, the nature of occupation, and increased Infantile Mortality.

The above are the general causes which lead to an increased mortality in the crowded portions of the Town, compared with the higher or more sparsely populated districts.

AGE AND RELATION TO DEATHS.

Of the 1,881 deaths registered, 448 occurred under the age of one year, 182 over one and under five years, 543 between the ages of twenty-five and sixty, and 579 among persons exceeding sixty years (see Table 3).

INFANTILE MORTALITY.

This is calculated upon the number of Deaths occurring during the year under one year of age to a thousand Births.

The mortality under this heading during the year amounted to 152 per thousand Births, compared with 178 in 1899, and 154 for England and Wales for the present year.

ZYMOTIC DEATH RATE.

The Zymotic Death Rate is calculated upon the number of Deaths occurring from the seven principal Diseases, viz. :—Small Pox, Scarlet Fever, Whooping Cough, Typhoid Fever, Measles, Diphtheria, and Diarrhœa. The total amounted to 163, giving for the year a Death Rate in this class only of 1·51 per thousand persons living, against 2·88 in 1899. The Zymotic Death Rate is the lowest recorded in the Borough since 1894 (see Table 5).

ANALYSIS OF DEATH RETURNS.

As in previous years, the weekly returns have been tabulated, and the causes of death allocated to their various classes.

GENERAL DISEASES.

Phthisis.—152 deaths were attributed to this disease. The persons affected belonged chiefly to the labouring classes, labourers and seamen suffering most. These deaths occurred principally in the low-lying crowded portions of the Town.

General Tuberculosis claimed 9 deaths, against 14 in 1899.

Tabes Mesenterica.—Twenty-two deaths were recorded, 21 of which occurred in children under five years of age.

Tubercular Meningitis was responsible for 17 Deaths.

Tubercular Peritonitis 1 Death, making a total of 201 Deaths due to Tubercular disease.

Respiratory Disease.—325 deaths were recorded under this heading, which includes Bronchitis, Pneumonia, and Pleurisy. The number exceeds the record of any year subsequent to 1892, when 363 deaths occurred. The explanation is to be found, if we consider, that during the first three months of the year under review an outbreak of **Influenza** existed, which proved directly fatal in 52 instances,

the largest number ever recorded in Southampton under this heading. It is probable that other persons succumbed from complications so common in this disease, viz. :—Bronchitis and Pneumonia.

Cancer.—The number of deaths registered under this heading amounted to 80, which is less than last year, when 91 deaths were registered.

Alcoholism claims ten deaths, the same number as in 1898 and 1899.

Small Pox.—Twenty-one cases of this disease were reported and isolated during the year. One proved fatal.

Case 1.—F. B., age 21, of Shirley Park Road. Admitted to Hospital Ship January 3rd. The patient was a fireman on the SS. "Nile." He arrived in Southampton in good health eight days previous to his attack.

Case 2.—J. B., aged 20, of Millbank Street. Notified and admitted to Hospital Ship January 17th. The patient was a fireman on SS. "Clyde." He arrived in Southampton some days previous to illness.

Case 3.—J. B., aged 45, of SS. "La Plata." Removed to Hospital Ship direct from Vessel.

Case 4.—Lily M., Cossack Place. Notified and removed April 15th. Source of infection undiscovered.

Case 5.—Susan D., Latimer Street. Notified and removed April 18th.

Cases 6, 7, 8, 9, 10, occurred to members of one family in Brinton's Road. All were removed to Hospital Ship April 30th and May 2nd.

Cases 11 and 12 were husband and wife, residing in Northam. Admitted to Hospital Ship May 18th and June 6th.

Case 13.—A. K., aged 24, of Radcliffe Road. Admitted to Hospital Ship June 14th.

Cases 14, 15, 16, and 17, refer to four Soldiers removed off Netley from the Transport "Kildonan Castle" to Hospital Ship October 5th.

Case 18.—B. G., aged 32. Negro employed on SS. "Magdalena." Taken ill some days after arrival. Notified and removed to Hospital Ship October 25th.

Case 19.—C. G., aged 25. Negro on SS. "Don." Discovered in Lodging House and removed to Hospital Ship November 9th. Severe confluent case, terminating fatally.

Case 20.—C. A., aged 26. Admitted to Hospital Ship for Itchen Urban Sanitary Authority.

Case 21.—J. A., aged 21. Admitted for South Stoneham Sanitary Authority.

It is believed that the cases of Small Pox affecting Sailors after their arrival in Southampton was due to their exposure to infection at Lisbon, where the disease was known to exist. The origin of infection to other cases could not be discovered. The prompt notification and removal of the cases to Hospital Ship, together with disinfection and subsequent vaccination and re-vaccination of all persons who had been in contact with the cases, prevented the spread of the disease.

With regard to infection brought by the SS. "Clyde," Southampton was more fortunate than other Districts, as the following extract from a report, dated February 8th, will show :—

"In regard to the infection from the "Clyde," we have had communications from London, Edinburgh, and Lymington, showing that, although the passengers landed perfectly well in Southampton, they developed Small Pox some days after their arrival at home. The same history applies to Lymington, except that the imported case in that district has led to several others. I am of opinion that this is a favourable opportunity to again request the Local Government Board to add Small Pox to the list of diseases contained in their regulations made in accordance with the Public Health Act of 1896. We should then be able to take the necessary precautions to warn the Local Authorities throughout the country of the arrival of persons from a district infected with Small Pox in manner similar to the arrivals from districts infected with Cholera, Plague, and Yellow Fever."

Scarlet Fever.—A decrease in the notification took place in respect of this disease; 223 cases were notified, against 294 in the previous year. Of these cases 143, or 64 per cent., were isolated in Hospital. The largest number of notifications took place in the third quarter of the year. Other cases were notified evenly throughout the year.

Measles.—An outbreak of this disease occurred during the early part of the year, resulting in 51 deaths. The disease was most prevalent during the first half of the year, when 46 deaths were registered. The outbreak entirely subsided by the end of August. This disease is not notifiable, information regarding its presence could only be obtained by enquiries in the neighbourhoods where the deaths occurred, together with information courteously afforded by Private Medical Practitioners, and by School Managers and Teachers and Officers of the School Board.

Action Taken.—Two schools (St. Joseph's and Holy Rood) were so seriously attacked that it became necessary to close them for a period of three weeks. Infected houses were frequently visited and disinfected on the recovery of the patients.

Typhoid Fever.—One hundred and sixteen cases were reported, as compared with 188 in the previous year. Thirty-seven of these cases were removed from or imported by vessels entering the Port, and one case was removed from a neighbouring district.

***Diphtheria.**—One hundred and thirty-four cases were notified and investigated, 24 of which proved fatal. Of the 134 cases notified, two cases were imported by vessels and two cases were removed for isolation from neighbouring districts. One hundred and one cases of the total notified occurred among children below the age of fifteen years, and 32 between fifteen and sixty-five years of age. Fifty-five were removed to Hospital, or 41 per cent. of the cases notified.

*Including Membranous Croup.

Infantile Diarrhœa. — Cases of this disease occurred during the months of August and September. During the year 41 deaths occurred from this disease among infants under one year of age, and seven over one year, making a total of 48 deaths. The majority of these deaths occurred during the month of September.

SOUTHAMPTON ISOLATION HOSPITAL.

The most important item of interest during the year was the opening of the New Isolation Hospital by the Worshipful the Mayor (Alderman G. A. E. Hussey), February 12th, 1900.

The Institution was fully described in my previous Annual Report. The total number of patients admitted during the year amounted to 286.

Hospital Ambulance. — The use of the Carriage Ambulance obtained in the early part of the year has been greatly appreciated by patients. It is difficult to distinguish it from a private conveyance.

Neighbouring Sanitary Authorities have readily availed themselves of your Committee's offer to admit patients into the Southampton Isolation Hospital on payment.

The following is the scale of charges adopted by the Council for the reception of private patients or for persons removed from outside districts. During the year £106 6s. 5d. was received for the maintenance of patients, and there is still a further sum of £114 8s. od. outstanding. (The amount outstanding has since been recovered) :—

COUNTY BOROUGH OF SOUTHAMPTON.

TARIFF FOR PAYING PATIENTS, ISOLATION HOSPITAL, SOUTHAMPTON.

SCARLET FEVER.

Isolation in the Public Wards for persons outside the County Borough of Southampton.	£1 11s. 6d. per week, plus cost of removal by ambulance.
--	--

Private Ward for persons residing outside the County Borough of Southampton.	£3 3s. od. per week.
--	----------------------

Private Ward for residents within the County Borough of Southampton.	£2 2s. od. per week.
--	----------------------

DIPHTHERIA.

Isolation in the Public Wards for persons residing outside the County Borough of Southampton.	£1 11s. 6d. per week, plus cost of removal by ambulance.
---	--

Private Wards for persons residing outside the County Borough of Southampton.	£3 3s. od. per week.
---	----------------------

Private Wards for persons within the County Borough of Southampton.	£2 2s. od. per week.
---	----------------------

TYPHOID FEVER.

Isolation in Public Wards for persons residing outside the Borough of Southampton.	£2 2s. od. per week, plus cost of removal by ambulance.
--	---

Private Ward for persons residing outside the County Borough of Southampton.	£4 4s. od. per week.
--	----------------------

Private Wards for persons residing within the County Borough of Southampton.	£3 3s. od. per week.
--	----------------------

SMALL POX.

Isolation in Public Wards on Hospital Ship for persons residing outside the County Borough of Southampton.	£3 3s. od. per week, plus cost of removal by ambulance.
--	---

MEASLES.

Removed from Ships.	£2 2s. od. per week.
---------------------	----------------------

£1 11s. 6d. if two or more in same ward.

REPORT FOR THE YEAR 1900.

Patients were admitted to the West Quay Hospital until March 6th. On the 6th March the whole of the patients, comprising 15 cases of Scarlet Fever, were transferred to the new Hospital.

The first fresh case was admitted to the new Hospital on the 6th March.

The accompanying Tables give particulars of the Diseases treated during the year.

SCARLET FEVER.

The cases were chiefly of a mild type, although amongst them were a few with severe complications and sequelæ.

There was only one death, the cause being Meningitis.

DIPHTHERIA.

In this disease the death rate still remains high. Of the ten deaths two occurred within twenty-four hours of admission, one being within one hour.

Apart from this, the high death rate is largely owing to the fact that the cases do not come under treatment early enough.

The following Table will emphasise this :—

Day of Illness when Admitted.		Number.	Recovered.	Died.
First		4	4	0
Second		11	11	0
Third		7	6	1
Fourth		5	2	3
Fifth		7	6	1
Later		10	7	3

Thus of eight cases that died only one was admitted before the fourth day, whereas of 36 cases that recovered 21 were admitted before the fourth day.

The Anti-Toxin treatment has been applied to practically all the cases ; even in very mild cases, and those in which the diagnosis is doubtful, it is of great value as a prophylactic.

BACTERIOLOGICAL EXAMINATIONS.

Bacteriological examinations in regard to Diphtheria have been made regularly during the latter half of the year.

Of the cases so examined, 3 out of 16 have been shown to be non-diphtheritic.

The information so given has enabled us to properly isolate such cases, and to discharge them from Hospital after a much shorter stay than is required in true Diphtheria.

TYPHOID FEVER.

Of the 52 cases admitted, the Table given shows that a large proportion—viz., 22—were removed from ships arriving at this Port.

Of the three deaths, two occurred within 48 hours of admission.

MEASLES.

The 13 cases admitted comprise :—

Seven cases removed from ships.

Four cases removed from the Emigrants' Home.

Two cases admitted from the Town, one being sent in as Scarlet Fever, and the other removed from the Hospital Ship.

Disease.	Remaining in Hospital 31st Dec., 1899.	Admitted.	Discharged.	Died.	Remaining in Hospital 31st Dec., 1900.	Average Duration of Stay.	Mortality per Cent.
Scarlet	24	143	141	1	25	DAYS. 58·6	0·7
Diphtheria	—	55	42	10	3	21	18
Typhoid... ..	—	52*	44	3*	5	27·5	3·8
Measles	—	13	13	—	—	18	—
Small Pox	—	22	21	1	—	28	4·5
Lymphangitis	—	1	1	—	—	21	—
Total	24	286	263	15	33	—	—

* One case admitted as Typhoid Fever proved to be Meningitis, and died in the Hospital.

COMPARATIVE MORTALITY OF CASES IN HOSPITAL
AND AT HOME.

Disease.	Total No. of Cases.	Mortality per Cent.	Admitted to Hospital.	Mortality per Cent.	Treated at Home.	Mortality per Cent.	Case Mortality in 1899.
Scarlet	230	.87	143	.7	87	1'15	'34
Diphtheria	134	20'15	55	18'2	79	21'52	26'8
Typhoid	116	12'93	52	3'8	64	20'31	10'6

SOURCE OF CASES.

Source of Cases.	Scarlet.	Typhoid.	Diphtheria.	Measles.	Small Pox.
Southampton ...	137	30	50	6	11
Other Sanitary Authorities ...	4	—	2	—	2
Ships	2	21	2	7	9

PRIVATE PAYING PATIENTS ADMITTED.

Scarlet Fever	...	...	...	2
Diphtheria ...	...	...	...	1
Typhoid Fever	...	...	...	6
Measles ...	...	...	...	4

Total 13

SUMMARY OF GENERAL ROUTINE WORK

Receiving the attention of the Health Department during
the Year 1900.

Nuisances reported by the Sanitary Inspectors	...	2770
Nuisances reported at the Office by Residents	...	550
Preliminary Notices served and complied with for Abatement of Nuisances ... ..	...	784
Legal Notices served for Abatement of Nuisances	...	343

Nuisances abated by Verbal Notice	...	...	2,148
House-to-House Inspections made by the Inspectors...			1,255
Inspections and re-Inspections by Inspectors relative to Nuisances	...	...	14,913
Inspectors' Visits to Houses in consequence of Notification of Infectious Diseases	...	...	795
Number of Inspections of Courts and Alleys		...	459
Houses disinfected	...	...	432
Schools disinfected	...	...	5
Drains tested with Smoke	...	...	281
Drains tested with Water	...	...	501
Drains found Defective after Testing	...	...	276
Drains found Choked and subsequently Cleared		...	461
Drains reconstructed	...	...	375
Drains re-trapped	...	...	547
Drains disconnected from Sewer and Ventilated		...	182
Inspection Chambers provided to House Drains		...	94
Bath, Lavatory, and Slopstone Waste Pipes disconnected from Drains and made to discharge over open Gully Traps	...	...	184
New Pans fixed to Closets	...	...	394
Cesspools and Catchpits abolished	...	...	62
Soil Pipes (indoor) abolished and new Soil Pipes fixed on outside of Houses and Ventilated	...	...	51
Old Drains abolished and new Drains substituted		...	39
Water laid on to Closets for flushing	...	...	148
Houses cleansed and whitewashed	...	...	257
Pan-Closets abolished and modern Closets substituted			18
Courts, Water-Closets, and Urinals re-limewashed	...		38
Badly-constructed Slopstone Sinks re-constructed	...		67
Urinals and Water-Closets re-constructed		...	36
Water-Closets in houses externally ventilated		...	10
Premises drained to Sewer (Shirley District)		...	19
Privies abolished and water closets substituted	ditto		19

Privies abolished and water closets substituted (Town District)	...	...	...	...	3
Premises drained to Sewer	...	...	ditto	...	3
Cesspools cleansed	...	...	(Shirley District)	...	9
Overcrowding of Houses abated	...	...	...	...	8
Animals kept in a dirty state in close proximity to Dwelling Houses—removed	...	...	...	...	12
Roofs of Houses defective and guttering under same, causing damp rooms—repaired	...	...	...	...	138
Paving in back yards ditto	...	...	...	...	81
Manure and offensive matter removed	...	...	...	...	122
Insanitary Stable demolished	...	...	...	...	1
Trough Closets fixed at a Factory	...	...	...	...	5
Smoke nuisance abated	...	...	...	...	1
Cellar re-limewashed	...	...	...	...	1
Defective water fittings reported to Water Works Department	...	...	...	...	27

SCHOOLS.

The following Public Schools have been disinfected owing to outbreak of Diphtheria and Scarlet Fever among the Scholars.

St. Edmund's School	
St. James'	„ Shirley.
St. Joseph's	„
St. Mark's	„ twice.

GENERAL SANITARY WORK.

Nuisances reported to the Department.

The total number of nuisances reported amounted to 3,320 of which 550 were reported by Residents of the Borough, necessitating the visit of an Inspector to the premises to investigate and report on the complaint.

Of the 14,913 visits made to premises, the majority were made to supervise the carrying out of the Sanitary Authorities requirements to abate the nuisances.

INFECTIOUS DISEASES NOTIFICATION.

Seven hundred and ninety-five visits were made by the Inspectors to infected houses for the purpose of enquiries, the removal of Patients, or disinfection of infected premises.

Abatement of Nuisances.—Of the 3,320 nuisances reported, 2,148 were abated by Verbal notice, 784 were abated by Preliminary notice, and 343 by Legal notice issued by order of the Sanitary Authority, while 35 notices remains over for subsequent compliance.

Water Closets without Water.—In Shirley and Freemantle, 25 legal notices were served to provide efficient flushing apparatus to closets. These were complied with. 123 notices were served for a similar purpose in other portions of the Town, and complied with.

UN SOUND FOOD SEIZED AND DESTROYED BY ORDER OF THE JUSTICES.

Meat, 1,398 lbs.; Fish including Bloaters, Skate, Haddock, Shrimps, Crabs, Whiting, Plaice, and Mackerel, 1,150 lbs.; Potatoes, 11 tons 3 cwt.; Fruit, 296 lbs.; and 60 Rabbits.

ARTICLES DISINFECTED AT THE STEAM DISINFECTOR.

The total number of articles amounted to 50,091, made up as follows:—Beds and Mattresses, 2,602; Bolsters and Pillows, 3,817; Blankets and Quilts, 5,970; Sheets, 3,400; Counterpanes, 1,735; Sundries, 32,567.

FOOD AND DRUGS ACT.

During the year 208 samples were taken by the Sanitary Inspectors and submitted to the Public Analyst for analysis as follows:—Milk, 98, Butter, 63, Condensed Milk, 4, Coffee, 24 Beer, 19.

FOOD AND DRUGS ACT.

Samples of Food submitted to the Public Analyst for analysis by the Sanitary Inspectors.

NO.	DATE.	ARTICLE.	RESULT OF ANALYSIS.	REMARKS.
1	Jan. 12	Milk.	Above average quality.	
2	" 12	"	Below average quality.	
3	" 12	"	Exceptionally good quality	
4	" 12	"	Average quality.	
5	" 19	"	Considerably below average quality.	
6	" 19	"	Ditto.	
7	" 19	"	Above average quality.	
8	" 19	"	Considerably above average quality.	
9	" 26	Coffee.	Genuine.	
10	" 26	"	Ditto.	
11	" 26	"	Ditto.	
12	" 26	"	Ditto.	
13	" 31	Milk.	Average quality.	
14	" 31	"	Ditto.	
15	" 31	"	Slightly above average quality.	
16	" 31	"	Below the average in quality.	
17	Feby. 1	"	Average quality.	
18	" 9	Butter.	Genuine Butter, free from preservative.	
19	" 9	"	Genuine Butter, artificially coloured & containing boric acid.	
20	" 9	"	Genuine Butter, containing boric acid.	
21	" 9	"	Genuine Butter, artificially coloured & containing boric acid.	
22	" 16	"	Genuine Butter, containing boric acid.	
23	" 16	"	Ditto.	
24	" 16	"	Genuine Butter, artificially coloured & containing boric acid.	
25	" 16	"	Ditto.	
26	" 23	Milk.	Average quality.	
27	" 23	"	Slightly below the average quality.	
28	" 23	"	Considerably above average quality.	
29	" 23	"	Sample deprived of not less than 43 parts out of every 100 parts of the fat it originally contained.	1900. March 22. Fined 10/- & 6/6 costs.
30	" 28	"	Very poor quality.	
31	Mar. 1	Butter.	Butter containing boric acid as a preservative.	

NO.	DATE.	ARTICLE.	RESULT OF ANALYSIS.	REMARKS.
32	Mar. 1	Butter.	Butter containing boric acid as a preservative.	
33	" 1	"	Ditto.	
34	" 1	"	Ditto.	
35	" 9	Coffee.	Genuine Coffee.	
36	" 9	"	Ditto.	
37	" 9	"	Ditto.	
38	" 9	"	Ditto.	
39	" 16	Milk.	Considerably above average quality.	
40	" 16	"	Average quality.	
41	" 16	"	Considerably above average quality.	
42	" 16	"	Slightly above average quality.	
43	" 23	Butter.	Butter containing boric acid as a preservative.	
44	" 23	"	Butter.	
45	" 23	"	Butter containing boric acid as a preservative.	
46	" 23	"	Ditto.	
47	" 30	"	Butter.	
48	" 30	"	Butter containing boric acid as a preservative.	
49	" 30	"	Ditto.	
50	" 30	"	Ditto.	
51	April 6	Milk.	Sample contained in every 100 parts not less than 2 parts of added water.	
52	" 6	"	Considerably below average in quality.	
53	" 6	"	Very poor quality, slightly deficient in cream.	
54	" 6	"	Average quality.	
55	" 18	Coffee.	Genuine.	
56	" 18	"	Ditto.	
57	" 18	"	Ditto.	
58	" 27	Milk.	Average quality.	
59	" 27	"	Below the average in quality.	
60	" 27	"	Average quality.	
61	" 27	"	Above average in quality.	
62	May 7	"	Below average in quality.	
63	" 7	"	Slightly below average quality.	
64	" 7	"	Average quality.	
65	" 7	"	Ditto.	
66	" 10	Butter.	Butter containing boric acid as a preservative.	
67	" 10	"	Ditto.	
68	" 10	"	Ditto.	
69	" 10	"	Ditto.	
70	" 21	"	Ditto.	
71	" 21	"	Ditto.	
72	" 21	"	Ditto.	
73	" 21	"	Ditto.	

NO.	DATE.	ARTICLE.	RESULT OF ANALYSIS.	REMARKS.
74	May 21	Butter.	Butter.	
75	" 24	Coffee.	Genuine.	
76	" 24	"	Ditto.	
77	" 24	"	Ditto.	
78	" 24	"	Ditto.	
79	June 1	Condensed Milk.	Separated condensed milk with added sugar.	
80	" 1	"	Condensed and sweetened milk.	
81	" 1	"	Ditto.	
82	" 1	"	Ditto.	
83	" 12	Milk.	Slightly below average in quality.	
84	" 12	"	Average quality.	
85	" 12	"	Ditto.	
86	" 12	"	Sample deficient in fat 10 parts out of every 100 parts originally present, and in every 100 parts at least 10 parts of added water.	1900. July 11. Fined 10/- & 8/6 costs.
87	" 15	"	Average quality.	
88	" 15	"	Considerably above average quality.	
89	" 15	"	Exceedingly rich in cream.	
90	" 15	"	Slightly below average quality.	
91	" 22	Coffee.	Genuine.	
92	" 22	"	"	
93	" 22	"	"	
94	" 22	"	"	
95	" 28	Milk.	Below average in quality.	
96	" 28	"	Slightly above average in quality.	
97	" 28	"	Considerably below average quality.	
98	" 28	"	Average quality.	
99	July 10	Butter.	Butter containing boric acid as a preservative.	
100	" 10	"	Ditto.	
101	" 10	"	Ditto.	
102	" 10	"	Ditto.	
103	" 13	"	Ditto.	
104	" 13	"	Margarine as defined by the Margarine Act.	1900. Sept. 5. Fined 10/- and 6/6 costs, and 10/- and 6/6 costs, the same not being la- belled.
105	" 13	"	Butter containing boric acid as a preservative.	
106	" 13	"	Ditto.	
107	" 23	Milk.	Below average in quality.	
108	" 23	"	Very poor quality.	
109	" 23	"	Ditto.	

NO.	DATE.	ARTICLE.	RESULT OF ANALYSIS.	REMARKS.
110	July 23	Milk.	Average quality.	
111	Sept. 6	"	Below average quality.	
112	" 6	"	Ditto.	
113	" 6	"	Above average quality.	
114	" 6	"	Considerably below average.	
115	" 11	Butter.	Butter containing boric acid as a preservative.	
116	" 11	"	Genuine.	
117	" 11	"	Butter containing boric acid as a preservative.	
118	" 11	"	Ditto.	
119	" 14	"	Genuine.	
120	" 14	"	Butter containing boric acid as a preservative.	
121	" 14	"	Genuine	
122	" 14	"	Margarine as defined by the Margarine Act.	1900. Oct. 25. Fined 40/- and 9/6 costs, and 3/- for being unlabelled.
123	" 14	"	Margarine as defined by the Margarine Act.	Test sample.
124	" 15	"	Ditto.	
125	" 17	"	Ditto.	1900. Nov. 2. Fined £10 & 10/6 costs.
126	" 19	"	Ditto.	Test sample.
127	" 20	"	Ditto.	
128	" 25	Milk.	Considerably above average.	
129	" 25	"	Ditto.	
130	" 25	"	Ditto.	
131	" 25	"	Slightly above average.	
132	" 25	"	Average quality.	
133	" 25	"	Considerably above average.	
134	" 27	"	Slightly below average.	
135	" 27	Butter.	Genuine.	
136	" 27	Milk.	Sample contained pure milk about 68 parts in every 100 parts, and added water not less than 32 parts.	Test sample.
137	Oct. 7	"	Above average in quality.	
138	" 7	"	Exceptionally rich in cream.	
139	" 7	"	Average quality.	
140	" 14	"	Sample contained in every 100 parts at least 2 parts of added water.	
141	" 14	"	Considerably above average quality.	
142	" 14	"	Below average quality.	
143	" 14	"	Poor quality.	
144	" 14	"	Considerably above average quality.	

NO.	DATE.	ARTICLE.	RESULT OF ANALYSIS.	REMARKS.
145	Oct. 14	Milk.	Average quality.	
146	" 14	"	Exceptionally good quality	
147	" 14	"	Slightly above average quality.	
148	" 14	"	Average quality.	
149	" 14	"	Considerably above average quality.	
150	" 14	"	Average quality.	
151	" 14	"	Ditto.	
152	" 14	"	Considerably below average.	
153	" 14	"	Considerably above average.	
154	" 14	"	Average quality.	
155	" 14	"	Very poor quality.	
156	" 14	"	Considerably above average.	
157	" 14	"	Slightly deficient in cream.	
158	" 15	"	Exceptionally rich in cream	
159	" 18	"	Considerably above average.	
160	" 18	"	Average quality.	
161	" 18	"	Above average quality.	
162	" 18	"	Sample contained in every 100 parts two parts of added water.	
163	" 26	Butter.	Butter.	
164	" 26	"	Ditto.	
165	" 26	"	Ditto.	
166	" 26	"	Ditto.	
167	" 26	"	Margarine as defined by the Margarine Act.	1900. Nov. 27. Fined 20/- and 8/6 costs, and 10/- and 8/6 for not being labelled.
168	" 30	Milk.	Sample contained 11 parts of added water.	1900. Nov. 27. Fined £5 and 11/6 costs.
169	Nov. 1	Coffee.	Genuine.	
170	" 1	"	Ditto.	
171	" 1	"	Ditto.	
172	" 2	Butter.	Margarine as defined by the Margarine Act.	1900. Nov. 27. Case dismissed. Appeal lodged.
173	" 13	Milk.	Above average quality.	
174	" 13	"	Exceptionally rich in cream	
175	" 13	"	Slightly below average.	
176	" 20	"	Considerably above average	
177	" 20	"	Slightly above average.	
178	" 20	"	Above average.	
179	" 23	Butter.	Genuine.	
180	" 23	"	Ditto.	
181	" 23	"	Butter containing boric acid as a preservative.	

NO.	DATE.	ARTICLE.	RESULT OF ANALYSIS.	REMARKS.
182	Nov. 23	Butter.	Genuine.	
183	Dec. 3	"	Ditto.	
184	" 4	Beer.	Beer free from Arsenic	
185	" 4	"	"	
186	" 4	"	"	
187	" 4	"	"	
188	" 4	"	"	
189	" 4	"	"	
190	" 4	"	"	
191	" 4	"	"	
192	" 4	"	"	
193	" 4	"	"	
194	" 4	"	"	
195	" 4	"	"	
196	" 4	"	"	
197	" 4	"	"	
198	" 4	"	"	
199	" 4	"	"	
200	" 4	"	"	
201	" 4	"	"	
202	" 6	Coffee.	Genuine.	
203	" 6	"	Ditto.	
204	" 6	Butter.	Ditto.	
205	" 6	Milk.	Slightly below average quality.	
206	" 6	"	Below average quality.	
207	" 6	"	Average quality.	
208	" 7	Beer	Beer free from Arsenic.	

Of these samples 16 were found adulterated. Proceedings were taken and penalties obtained in seven cases. One case was dismissed ; appeal lodged by the Sanitary Authority.

See Analyst's Report in appendix.

COMMON LODGING HOUSES.

There are eight Registered Common Lodging Houses in the Borough. The number of inspections made during the year amounted to 371, during the months of April and October the whitewashing was carried out in accordance with the Public Health Act. No case of Infectious Disease occurred among the inmates during the year.

CASES BEFORE THE JUSTICES OTHER THAN FOOD AND DRUGS CASES DURING THE YEAR 1900.

PARTICULARS.	FINES.
For wilful Exposure in the Public Streets, without proper precautions, while suffering from Searlet Fever	10/- and costs.
For being in charge of a Person suffering from Searlet Fever, and permitting such sufferer to expose herself in the Public Streets ...	10/- and costs.
For being in possession of a quantity of Unsound Meat	£36 7s. 6d., including costs.

HOUSES UNFIT FOR HUMAN HABITATION.

During the year the following Houses have been certified as unfit for Habitation :—

Situation of Property.	No. of Houses.	Date of Notice.	Remarks.
Graham Street, 6	One House	Jan. 30	House made habitable
Orchard Lane, 56, 57	Two Houses	„ 30	Houses demolished
Lansdowne Hill, 26, 27, 28	Three Houses	Feb'y. 2	Houses closed
Castle Buildings, 2, 3	Two Houses	May 25	Ditto
Millbank Street, 121	One House	„ 25	House made habitable
Brooklyn Terrace	9 Houses	Oct. 8	Houses being made habitable
Brooklyn Road	28 Houses	„ 8	Ditto.
Brooklyn Terrace	23 Houses	„ 29	Ditto.

**PREMISES CONNECTED TO THE PUBLIC SEWERS
IN THE WESTERN DISTRICT OF THE ADDED
AREAS, 1900.**

Situation of Premises.	Houses Connected to Public Sewer.	Cesspools Abolished.	Privies Abolished.
Berrywood	12	7	—
Millbrook	6	4	1
Regent's Park	3	—	—
Romsey Road	8	—	8
Mousehole Lane	1	1	—
Kingsley Estate and } Foundry Lane }	11	1	8
Maybush	1	—	1
Shirley	38	14	2

WELLS.

A sample of water from a private well was taken at Shirley and submitted to the Public Analyst for analysis. The water was found polluted. The well was closed, and water from the South Hants supply laid on to the premises.

**INSPECTIONS MADE OF SLAUGHTER HOUSES,
WORKROOMS, &c.**

	NO. OF VISITS.	NUISANCES ABATED.	
		LIMEWASHING.	OTHER NUISANCES.
Slaughterhouses ...	1395	76	19
Dairies, Cowsheds, &c.	514	15	7
Workshops	378	26	16
Bakehouses	451	127	3
Other Premises	73	—	21
On Complaint	31	—	—

Slaughterhouses.—Number on register, 44, one of which is not in use. During the year 2 licences have been transferred, 3 have been given up, and the premises re-built in two cases.

Dairies, Cowsheds, &c.—The number of premises on the register is 268, including 20 cowsheds, 47 dairies, 15 private houses, and 5 retail beer-houses. The remainder, 171, consists largely of small general shops.

Workshops.—Number on register, 276.

Bakehouses.—Number on register, 135.



APPENDIX A.—CONTENTS.

SYNOPSIS OF TABLES.

- Table 1.—Showing Births and Birth Rates for the whole Borough and various Districts for ten years, 1891-1900.
- „ 2.—Showing Deaths and Death Rates for the whole Borough and various Districts for ten years, 1891-1900.
- „ 3.—Death from all causes at subjoined ages in the Borough of Southampton, from 1891-1900.
- „ 4.—Causes of Deaths in Southampton for ten years, 1891-1900.
- „ 5.—Showing Population, Birth Rates, Death Rates, Zymotic Death Rates, Infantile Mortality, and Marriage Rates in Southampton and England and Wales for twenty years, 1881-1900.
- „ 6.—Table prepared in accordance with Local Government Board's instructions. Showing Population, Births, and Deaths for ten years.
- „ 6A.—Ditto. Showing Population, Births, and Deaths in the various Districts of the Borough for ten years
- „ 6B.—Ditto. Showing cases of Infectious Diseases notified during 1900, Classified according to ages and localities, and the number removed to Hospital.
- „ 6C.—Ditto. Showing Deaths occurring in 1900, Classified according to diseases, ages, and localities.
- „ 7.—Deaths from Zymotic Diseases for five years.
- „ 8.—Comparative Mortality of Southampton and forty-two towns.
- „ 9.—Showing causes of, and ages of all Deaths occurring in the Borough of Southampton, during the year ended 31st December, 1900.
- „ 10.—Showing Marriage Rate, Birth Rate, Death Rate, Zymotic Death Rate, and Infantile Mortality for the Borough and its various Districts for the Year 1900.
- „ 11.—Showing number and description of cases of Infectious Disease notified to the Medical Officer of Health in each of the four quarters of 1900.
- „ 12.—Showing all Diseases notified during the past nine years, and the number of them admitted to Hospital.
- „ 13.—Vaccination returns for Town Proper.
- „ 14.—Abstract from the Meteorological Register kept at the Ordnance Survey Office, Southampton, during the year 1900.

APPENDIX A.

NOTE.—The totals in the following Tables include Deaths of Non-Residents, but the various Death Rates are calculated upon corrected totals.

TABLE 1.

SHOWING BIRTHS AND BIRTH RATES FOR THE WHOLE BOROUGH AND VARIOUS DISTRICTS FOR 10 YEARS—1891—1900.

Year	Whole Borough.				Town Proper		Portswood		Shirley and Freemantle	
	Males	Females	Total births	Birth rate	Total births	Birth rate	Total births	Birth rate	Total births	Birth rate
1891	1069	976	2045	31.30	1740	31.37	305	30.92	—	—
1892	988	923	1911	28.63	1639	29.14	272	26.15	—	—
1893	1 118	997	2015	29.50	1704	29.90	311	28.01	—	—
1894	1097	1016	2113	30.19	1797	30.98	316	26.33	—	—
1895	1085	1095	2180	30.38	1874	31.90	306	23.54	—	—
1896	1467	1392	2859	30.36	1912	32.13	368	25.82	579	28.38
1897	1458	1479	2937	30.43	1886	31.43	439	28.78	612	28.73
1898	1545	1400	2945	29.76	1847	30.55	479	29.94	619	28.51
1899	1534	1461	2995	29.55	1803	29.61	508	30.32	684	28.86
1900	1477	1452	2929	28.80	1751	28.58	484	27.65	694	28.04
Average 10 years.	1273	1219	2492	29.84	1795	30.55	378	27.74	637	28.50

TABLE 2.

SHOWING DEATHS AND DEATH RATES FOR THE WHOLE BOROUGH AND VARIOUS DISTRICTS FOR 10 YEARS, 1891—1900.

Year	Whole Borough.				Town Proper		Portswood		Shirley and Freemantle	
	Males	Females	Total deaths	Death rate	Total deaths	Death rate	Total deaths	Death rate	Total deaths	Death rate
1891	614	577	1191	17.95	1069	18.95	122	12.37	—	—
1892	723	743	1466	21.53	1297	22.51	169	16.25	—	—
1893	704	666	1370	19.52	1230	20.93	140	12.61	—	—
1894	629	532	1161	15.99	1020	16.86	141	11.75	—	—
1895	716	679	1395	18.69	1240	20.18	155	11.92	—	—
1896	837	820	1657	17.15	1170	18.77	188	13.54	299	14.95
1897	864	847	1711	17.34	1209	19.73	191	12.98	311	15.11
1898	882	874	1756	17.25	1222	18.94	229	15.00	305	14.31
1899	1072	920	1992	19.08	1402	21.82	246	14.92	344	14.98
1900	990	891	1881	17.59	1325	20.36	218	12.97	338	13.99
Average 10 years.	803	755	1558	18.21	1218	19.90	180	13.43	319	14.67

TABLE 3.

DEATHS FROM ALL CAUSES AT SUBJOINED AGES IN THE BOROUGH OF
SOUTHAMPTON, FROM 1891 TO 1900.

Year.	At all Ages.	Under 1 Year.	1 and under 5	5 and under 15	15 and under 25	25 and under 60	60 and upwards.
1891	1191	252	102	41	55	314	427
1892	1466	283	157	52	48	425	501
1893	1370	317	167	58	61	401	366
1894	1161	253	119	58	53	337	341
1895	1395	339	149	43	59	377	428
1896	1657	420	218	72	73	453	421
1897	1711	457	211	60	54	421	508
1898	1756	452	171	85	65	497	486
1899	1992	534	211	77	66	533	571
1900	1881	418	182	64	65	513	579

TABLE 4.

CAUSES OF DEATHS IN SOUTHAMPTON FOR TEN YEARS—1891 TO 1900.

Causes.	1891	1892	1893	1894	1895	1896	1897	1898	1899	1900
Small Pox	1	1	9	3	—	1	—	4	—	1
Scarlatina	3	2	4	3	15	39	11	3	1	2
Diphtheria	2	1	6	5	3	6	9	54	50	26
Membranous Croup	—	1	2	—	2	3	1	4	2	1
Enteric or Typhoid Fever ...	9	16	22	13	10	13	6	24	20	15
Continued Fever	1	2	—	—	—	—	1	—	—	—
Relapsing „	—	—	—	—	—	—	—	—	—	—
Puerperal „	1	2	1	1	5	5	1	1	1	—
Erysipelas	1	3	5	6	—	6	1	2	4	5
Measles	12	8	45	13	14	62	47	16	31	51
Whooping Cough	5	20	15	31	7	22	61	26	40	19
Diarrhœa and Dysentery.....	13	28	54	13	65	50	80	136	153	48
Rheumatic Fever	—	1	3	9	7	2	6	2	7	4
Influenza	3	41	5	13	18	5	16	15	22	52
Phthisis	100	108	102	111	109	143	141	135	165	152
Cancer	54	53	66	63	61	81	70	101	91	80
Bronchitis, Pneumonia, and Pleurisy	190	346	215	193	242	248	266	219	301	305
Heart Disease	108	121	98	83	112	126	121	164	161	130
Injuries	61	41	44	50	61	57	48	56	66	73
Other Diseases	627	671	644	551	664	788	825	794	877	888
Total	1191	1466	1370	1161	1395	1657	1711	1756	1992	1881

TABLE 5.

SHOWING POPULATION, BIRTH RATES, DEATH RATES, ZYMOTIC DEATH RATES, INFANTILE MORTALITY, AND MARRIAGE RATES IN SOUTHAMPTON AND ENGLAND AND WALES FOR TWENTY YEARS, 1881-1900.

Year.	Population	Births			Deaths			Zymotic Deaths				Infantile Mortality. Deaths under 1 year per 1,000 Births Registered.			Marriages.		
		Total Births	Birth Rate	Birth Rate England and Wales	Total Deaths	Death Rate	Death Rate England and Wales	Total Zymotic Deaths	Zymotic Death Rate	Zymotic Death Rate England and Wales	South- ampton	England and Wales	Total Marri- ages	Marri- age Rate	Marriage Rate England and Wales		
1881	60,051	2,019	33.6	33.9	1,149	18.7	18.9	119	1.98	2.32	119	130	—	—	—		
1882	60,578	1,948	32.1	33.7	1,111	18.0	19.6	87	1.31	2.73	131	141	—	—	—		
1883	61,105	2,122	34.7	33.2	1,283	20.6	19.5	168	2.79	2.20	137	137	—	—	—		
1884	61,633	1,965	31.9	33.5	1,052	16.7	19.6	75	1.21	2.64	114	147	—	—	—		
1885	62,160	1,914	30.8	32.5	1,190	18.9	19.0	146	2.34	2.19	146	138	—	—	—		
1886	62,668	1,926	30.7	32.4	1,153	18.0	19.3	71	1.13	2.36	140	150	—	—	—		
1887	63,215	1,979	31.3	31.4	1,214	18.7	18.8	135	2.13	2.29	145	145	—	—	—		
1888	63,742	1,996	31.3	30.5	1,094	16.9	17.9	94	1.47	2.10	126	144	—	—	—		
1889	64,270	1,966	30.6	30.6	1,081	16.3	17.8	85	1.32	1.77	117	144	—	—	—		
1890	64,797	1,848	28.5	29.7	1,168	17.5	19.2	82	1.26	2.03	129	151	—	15.3	14.1		
1891	65,325	2,045	31.3	31.4	1,191	18.0	20.2	47	0.72	1.83	123	149	520	16.4	14.2		
1892	66,650	1,911	28.6	30.5	1,466	21.5	19.0	79	1.15	1.90	148	148	551	17.3	14.7		
1893	68,200	2,015	29.5	30.8	1,370	19.5	19.2	157	2.32	2.52	157	159	589	16.0	15.1		
1894	70,000	2,113	30.2	29.6	1,161	16.0	16.6	81	1.14	1.88	119	137	583	17.7	15.5		
1895	71,750	2,180	30.4	30.3	1,395	18.7	18.7	111	1.33	2.21	155	161	648	17.6	14.7		
1896	94,150	2,859	30.4	29.7	1,657	17.2	17.1	192	2.04	2.17	146	161	617	17.6	15.0		
1897	96,500	2,937	30.4	29.7	1,711	17.3	17.4	217	2.24	2.15	156	156	675	18.8	15.0		
1898	98,950	2,945	29.8	29.4	1,756	17.3	17.6	267	2.63	2.22	153	161	838	17.8	15.8		
1899	101,350	2,995	29.6	29.3	1,992	19.1	18.3	297	2.88	2.21	178	163	848	17.6	16.0		
1900	103,500	2,929	28.3	28.9	1,881	17.6	18.3	163	1.51	2.00	152	154	791	16.0	16.2		
													896	17.7	16.5		
													846	16.3	16.0		
Average 20 years		2,230	30.7	31.0	1,353	18.1	18.6	133	1.75	2.18	139	148	661	17.1	15.2		

NOTE.—The Zymotic Deaths and Death Rates include only the seven principal Zymotic Diseases, viz. :—Whooping Cough, Measles, Diarrhoea, Diphtheria, Scarlet Fever, Typhoid Fever, and Small Pox.

The following Tables—Nos. 6, 6 A, 6 B, and 6 C—are prepared in accordance with the instructions of the Local Government Board.

TABLE 6.

YEAR.	Population estimated to Middle of each year.	BIRTHS.		DEATHS UNDER ONE YEAR OF AGE.		DEATHS AT ALL AGES. TOTAL.		DEATHS IN PUBLIC INSTITUTIONS.	Deaths of Non-residents registered in District.	DEATHS AT ALL AGES NETT.	
		Number.	Rate.*	Number.	Rate per 1,000 Births registered.	Number.	Rate.*			Number.	Rate.*
1	2	3	4	5	6	7	8	9	10	11	12
1890	64,797	1,848	28.5	239	120	1,168	18.2	131	31	1,137	17.5
1891	65,325	2,045	31.3	232	123	1,191	18.2	200	18	1,173	18.0
1892	66,650	1,911	28.6	253	148	1,466	22.0	192	31	1,435	21.5
1893	68,200	2,015	29.5	317	157	1,370	20.1	208	37	1,333	19.5
1894	70,000	2,113	30.2	233	119	1,161	16.6	175	42	1,119	16.0
1895	71,750	2,180	30.4	339	155	1,395	19.4	220	54	1,341	18.7
1896	94,150	2,859	30.4	420	146	1,657	17.6	203	42	1,615	17.2
1897	96,500	2,937	30.4	457	156	1,711	17.3	194	37	1,674	17.3
1898	98,950	2,945	29.8	452	153	1,756	17.7	248	49	1,707	17.3
1899	101,350	2,995	29.6	534	178	1,992	19.6	258	58	1,934	19.1
Averages for years 1896-1899	97,737	2,934	30.1	466	158	1,779	18.1	226	46	1,732	17.7
1900	103,500	2,925	28.3	448	152	1,181	18.2	286	61	1,820	17.6

* Rates calculated per 1000 of estimated population.
 NOTE.—The deaths included in Column 7 of this table are the whole of those registered during the year as having actually occurred within the district or division. The deaths included in Column 11 are the number in Column 7, corrected by the subtraction of the number in Column 10.

TABLE 6 A.

YEAR.	WHOLE DISTRICT.				TOWN.				PORTSWOOD.				SHIRLEY.			
	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all ages.	Deaths under 1 year.
1890	64,797	1,848	1,137	239	55,216	1,585	1,005	—	9,571	263	132	—	—	—	—	—
1891	65,325	2,045	1,173	252	55,463	1,740	1,051	—	9,802	305	122	—	—	—	—	—
1892	66,650	1,911	1,435	283	56,250	1,639	1,266	—	10,400	272	169	—	—	—	—	—
1893	68,200	2,015	1,333	317	57,000	1,704	1,193	—	11,100	311	140	—	—	—	—	—
1894	70,000	2,113	1,119	253	58,000	1,797	978	—	12,000	316	141	—	—	—	—	—
1895	71,750	2,180	1,341	339	58,750	1,874	1,186	—	13,000	306	155	—	—	—	—	—
1896	94,150	2,859	1,615	420	59,500	1,912	1,117	283	14,250	368	193	51	20,400	579	305	86
1897	96,500	2,937	1,674	457	60,000	1,886	1,184	313	15,250	439	198	64	21,300	612	323	90
1898	98,950	2,945	1,707	452	60,450	1,847	1,145	285	16,000	479	240	72	22,500	619	322	95
1899	101,350	2,995	1,934	534	60,900	1,803	1,329	338	16,750	508	250	82	23,700	674	355	114
Averages of Years 1896-1899.	97,737	2,934	1,732	466	60,212	1,862	1,194	305	15,562	448	220	67	21,975	623	326	94
1900	103,500	2,925	1,821	448	61,250	1,751	1,247	305	17,500	484	227	53	24,750	694	346	83

TABLE 6 B.

Cases of Infectious Disease notified during the year 1900.

NOTIFIABLE DISEASE.	CASES NOTIFIED IN WHOLE DISTRICT.						TOTAL CASES NOTIFIED IN EACH LOCALITY.						NO. OF CASES REMOVED TO HOSPITAL FROM EACH LOCALITY.*				
	At all ages.	At Ages—Years.					Town.	Portwood and Bitterne Park.	Shirley, Freemantle and Millbrook.	Cases imported by vessels.	Cases removed from other Districts for isolation.	Town.	Portwood and Bitterne Park.	Shirley, Freemantle and Millbrook.	Cases imported by vessels.	Cases removed from other Districts for isolation.	
		Under 1	1 to 5	5 to 15	15 to 25	25 to 65											65 and upw's
Small-pox ..	22	1	—	4	8	9	11	—	—	9	2	11	—	—	9	2	
Cholera ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Diphtheria..	133	3	39	59	15	17	50	61	18	2	2	18	22	10	2	2	
Membranous Croup	1	—	—	1	—	—	—	—	1	—	—	—	—	1	—	—	
Erysipelas ..	64	4	—	6	6	42	51	6	6	1	—	51	—	—	2	—	
Scarlet Fever	230	—	54	146	24	6	95	25	103	3	4	95	14	68	2	4	
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Enteric Fever	111	—	3	31	29	47	56	8	9	37	1	27	1	2	22	—	
Relapsing Fever	—	—	—	—	—	3	3	1	—	1	—	—	—	—	—	—	
Continued Fever	5	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Plague ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Measles ..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	4	
Lymphangitis	—	—	—	—	—	—	—	—	—	—	—	2	—	—	1	—	
Totals ..	566	8	95	249	92	124	266	101	137	53	9	113	37	81	43	12	

* In addition to these cases: 11 cases of Enteric Fever, 6 Diphtheria, and 1 Erysipelas were isolated in the Royal South Hants and Southampton Hospital.

TABLE 6 C.

CAUSES OF DEATH.	DEATHS IN WHOLE DISTRICTS AT SUBJOINED AGES.							DEATHS IN LOCALITIES (AT ALL AGES)			DEATHS IN PUBLIC INSTITUTIONS.
	All ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards,	Town.	Portwood.	Shirley.	
Small-pox	—	—	—	—	—	—	—	—	—	—	—
Measles	51	14	30	7	—	—	—	34	5	12	—
Scarlet Fever	2	—	1	1	—	—	—	—	—	2	1
Whooping Cough	19	8	10	1	—	—	—	16	2	1	—
Diphtheria and Mem- branous Croup	24	1	13	10	—	—	—	11	10	3	11
Croup	2	—	1	1	—	—	—	1	1	—	—
Fever { Typhus	—	—	—	—	—	—	—	—	—	—	—
{ Enteric	13	—	1	1	3	8	—	9	2	2	3
{ Other continued	—	—	—	—	—	—	—	—	—	—	—
Epidemic Influenza	52	2	—	2	1	26	21	33	10	9	2
Cholera	—	—	—	—	—	—	—	—	—	—	—
Plague	—	—	—	—	—	—	—	—	—	—	—
Diarrhœa	48	41	3	—	—	4	—	37	4	7	1
Enteritis	42	27	7	—	1	5	2	23	3	16	1
Puerperal Fever	—	—	—	—	—	—	—	—	—	—	—
Erysipelas	5	2	—	—	—	3	—	3	2	—	—
Other Septic Diseases	1	—	—	—	—	1	—	1	—	—	1
Phthisis	149	2	2	3	20	119	3	102	21	26	32
Other Tubercular Dis- eases	48	22	14	8	2	2	—	39	6	3	3
Cancer, Malignant Dis- ease	79	—	1	—	1	46	31	50	10	19	12
Bronchitis	174	44	19	2	—	35	74	114	20	40	13
Pneumonia	125	25	22	5	5	53	15	95	15	15	8
Pleurisy	3	—	—	—	—	1	2	2	—	1	—
Other Diseases of Res- piratory organs	15	—	—	1	—	11	3	14	—	1	3
Alcoholism	—	—	—	—	—	—	—	—	—	—	—
Cirrhosis of Liver }	25	—	—	—	—	21	4	16	2	7	4
Venereal Diseases	5	5	—	—	—	—	—	3	1	1	—
Premature Births	79	79	—	—	—	—	—	49	11	19	—
Diseases and Accidents of Parturition	6	—	—	—	1	5	—	3	2	1	—
Heart Diseases	171	2	2	3	9	92	63	121	19	31	38
Accidents	46	8	8	2	4	20	4	31	1	14	12
Suicides	7	—	—	—	1	6	—	5	1	1	1
All other causes	629	164	46	10	11	142	256	435	79	115	94
All causes	1,820	446	180	57	59	600	478	1247	227	346	240

TABLE 7.

The total Deaths from Zymotic Diseases during 1900 amounted to 232, 50 being of a notifiable and 182 of a non-notifiable character, against totals of 329 in 1899 and 288 in 1898.

	1896	1897	1898	1899	1900	
Small Pox	1	0	0	0	1	Notifiable under the Infectious Dis- ease (Notification) Act, 1889. Death Rate 0·48.
Scarlet Fever	39	11	3	1	2	
Diphtheria	6	9	54	50	26	
Membranous Croup	3	1	4	2	1	
Enteric or Typhoid Fever..	13	6	23	20	15	
Continued Fever	0	1	0	0	0	
Erysipelas	6	1	2	4	5	
Puerperal Fever	5	1	1	1	0	Not Notifiable un- der the Infections Disease (Notifica- tion) Act, 1889. Death Rate 1·76.
Measles	62	47	16	31	51	
Whooping Cough.. ..	22	61	26	40	19	
Influenza	5	17	15	22	52	
Diarrhœa and Dysentery ..	50	80	134	153	48	
Malarial Fever	0	2	2	0	3	
Pyæmia and Septicæmia ..	1	2	3	1	1	
Syphilis	1	4	5	3	5	
Febricula	2	0	0	0	0	
Vaccina	2	0	0	0	0	
Varicella	0	0	0	1	0	
Other Zymotic Diseases ..	0	0	0	0	3	
Totals	218	243	288	329	232	

TABLE 8.

COMPARATIVE MORTALITY OF SOUTHAMPTON AND 42 TOWNS.

BOROUGH.	Estimated Population 1900.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality. Deaths under 1 year per 1,000 Births Registered.	Average Death Rate— 10 years, 1890-1899.
Aston Manor ..	80,497	31· 2	15· 8	3· 4	167	15·8
Birkenhead ..	117,170	29· 2	16· 7	1· 7	158	18·9
Birmingham ..	519,610	32· 7	21· 0	2· 7	199	20·4
Bolton ..	161,240	29· 0	19· 5	2· 3	170	21·8
Bradford ..	291,535	23· 0	16· 3	1· 3	140	19·1
Brighton ..	124,148	23· 6	17· 8	2·25	166	17·3
Bury ..	61,765	22· 5	17· 7	2· 1	171	21·4
Cardiff ..	194,247	26· 8	13· 7	2· 1	140	17·7
Coventry ..	73,000	31· 0	16· 8	2· 3	131	17·3
Croydon ..	131,186	24· 9	14· 6	—	132	15·1
Derby ..	107,991	26· 8	17· 1	2· 3	174	17·1
Dudley ..	49,483	32· 8	20· 4	5· 8	197	20·6
Gateshead ..	109,403	35· 4	19· 2	1· 7	167	19·8
Halifax ..	101,187	22· 8	18· 1	1· 2	135	18·9
Hanley ..	61,833	37· 6	22· 0	3· 9	209	20·4
Huddersfield ..	104,484	22· 8	16· 8	1· 5	132	17·3
Kingston-on-Hull ..	243,287	32· 6	19· 2	2· 9	180	17·4
Leeds ..	431,287	30· 5	20· 1	3· 0	183	20·4
Liverpool ..	668,645	34· 0	23· 6	3· 7	146	24·7
Manchester ..	550,864	31·38	23·42	3·14	188·74	23·3
Middlesborough ..	97,007	34·46	24·81	1· 6	198	20·3
Newcastle-on-Tyne ..	234,369	30· 4	19· 1	1· 2	169	20·6
Newport, Mon. ..	75,088	23· 6	16· 7	2· 4	170	17·8
Northampton ..	69,242	22· 3	13· 7	1· 4	144	15·5
Nottingham ..	242,676	27· 3	19· 1	2· 3	196	18·4
Oldham ..	153,297	24· 1	19· 5	2· 4	172	21·1
Plymouth ..	102,161	27· 8	20· 5	2· 2	174	20·2
Reading ..	72,328	26· 1	14· 2	1· 7	144	15·1
Rhondda ..	129,028	34· 6	16· 9	3· 7	186	18·9
Rochdale ..	75,282	23· 9	20· 2	1· 3	167	19·1
Salford ..	22,816	33· 0	25· 1	4· 0	208	24·2
Sheffield ..	365,922	34·36	22· 6	4· 5	200	21·4
Southampton ..	103,500	28· 3	17· 6	1· 5	152	18·0
Southport ..	52,238	18· 5	15· 0	0·61	144	16·6
South Shields ..	105,677	32· 9	19· 4	2· 1	150	15·3
St. Helens ..	88,480	35· 0	21· 6	3· 0	188	21·4
Stockport ..	82,440	27· 8	21· 4	2· 6	203	22·6
Stockton-on-Tees ..	59,374	30· 0	17· 1	1· 6	141	17·9
Sunderland ..	147,398	35· 6	21· 4	2· 9	169	21·7
West Bromwich ..	64,000	35· 0	19· 8	2· 5	196	19·1
West Ham ..	294,000	30· 2	17· 5	3· 6	192	19·3
Wolverhampton ..	89,598	35· 5	22· 3	4· 4	207	21·5
Warrington ..	65,000	26· 7	19· 4	2· 5	162	21·9

TABLE 9.

TABLE SHOWING ALL DEATHS OCCURRING IN THE BOROUGH OF SOUTHAMPTON DURING THE YEAR ENDING 31st DECEMBER, 1900, CLASSIFIED ACCORDING TO DISEASES AND AGES.

DISEASES CLASSIFIED.	AGES.												SEX.		TOTALS.		
													Males.	Females.			
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95	95 and upwards.	Total over 95 years.			
CLASS	75	59	134	23	4	10	12	11	15	11	8	4	...	98	113	119	232
I.—ZYMOTIC DISEASES	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
II.—PARASITIC DISEASES	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
III.—DIETETIC DISEASES	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
IV.—CONSTITUTIONAL DISEASES	28	21	49	14	26	52	37	35	35	30	11	...	...	262	164	147	311
V.—DEVELOPMENTAL DISEASES	87	1	88	...	...	...	...	...	...	...	...	...	...	2	102	135	237
* VI.—LOCAL DISEASES	171	87	258	23	28	48	83	101	131	160	90	11	...	675	494	439	933
VII.—DEATHS FROM VIOLENCE	9	8	17	4	7	9	14	8	10	3	1	...	...	56	59	14	73
VIII.—DEATHS FROM ILL-DEFINED OR NOT SPECIFIED CAUSES	78	6	84	...	...	...	...	1	...	...	...	...	...	1	52	33	85
Totals	448	182	630	64	65	121	169	162	1,2	243	185	48	2	1,251	990	891	1881
* Class VI.—Local Diseases.																	
1.—Diseases of Nervous System	58	25	83	4	10	5	10	21	32	41	21	4	...	148	116	115	231
2.—Organs of Special Sense	1	...	1	3	...	2	...	...	...	...	...	...	...	5	2	4	6
3.—Circulatory System	...	2	4	3	9	13	22	25	42	43	19	2	...	178	92	90	182
4.—Respiratory	69	42	111	9	5	16	29	26	35	51	39	4	...	214	179	146	323
5.—Digestive	37	16	53	4	3	5	9	17	14	13	5	...	...	70	69	54	123
6.—Lymphatic	...	...	...	...	...	...	...	...	2	...	...	...	...	2	2	2	2
7.—Urinary	...	1	1	...	...	...	10	12	3	11	2	...	...	40	26	15	47
8.—Reproductive	...	...	...	...	1	4	2	...	...	...	2	...	...	9	2	7	9
9.—Osseous	1	1	2	...	...	1	...	...	...	...	...	...	...	1	1	2	3
10.—Integumentary	3	...	3	...	...	...	1	...	3	1	2	1	...	8	5	6	11
Totals	171	87	258	23	28	48	83	101	131	160	90	11	...	675	494	439	933

TABLE IX.—CONTINUED.

DISEASES CLASSIFIED.	AGES.										SEX.		TOTALS.			
											Males.	Females.				
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75				75 to 85	85 and upwards.	Total over 5 Years
Class III.—Dietetic Diseases.																
Alcoholism ... ..	...	...	...	...	2	3	4	...	...	1	...	...	10	6	4	10
Class IV.—Constitutional Diseases.																
Phthisis	2	2	4	3	21	49	37	21	14	2	1	...	148	87	65	152
Tuberculosis (general) ...	3	4	7	1	...	...	1	...	...	...	...	...	2	5	4	9
Tubercular Meningitis ...	3	6	9	6	2	...	...	...	...	...	...	...	8	8	9	17
Tabes Mesenterica	16	5	21	1	...	...	...	...	...	...	...	...	1	10	12	22
Tubercular Peritonitis ...	...	...	...	...	1	...	...	...	...	...	...	...	1	1	...	1
Cancer ... ..	...	1	1	...	1	2	13	13	19	23	8	...	79	37	43	80
Tumour ... ..	...	...	...	...	...	...	2	...	...	...	...	...	2	...	2	2
Rheumatism ... ..	...	...	...	...	...	...	...	...	...	1	...	...	2	1	...	1
Rheumatic Fever	1	...	1	...	1	...	2	...	...	2	...	...	3	3	...	4
Rheumatic Gout ... ..	...	...	...	...	...	1	1	...	2	2	...	...	5	4	4	5
Rheumatoid Arthritis ...	...	...	...	1	...	...	1	1	...	1	1	...	4	4	4	5
Rickets	3	2	5	...	...	...	...	...	...	...	1	...	...	...	1	1
Diabetes Mellitus ... ..	...	...	...	...	...	...	...	...	...	...	1	...	1	...	1	1
Pernicious Anæmia ... ..	...	...	...	...	...	...	1	1	...	...	...	...	2	1	...	2
Lymphadenoma ... ..	...	...	...	1	...	...	1	1	...	...	...	...	2	1	2	3
Purpura ... ..	...	1	1	1	...	...	...	...	...	...	...	...	1	1	1	1
Abscess ... ..	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
Chill ... ..	...	...	...	...	...	...	...	...	...	1	...	...	1	1	...	1

TABLE IX.—CONTINUED.

DISEASES CLASSIFIED.	AGES.										SEX.		TOTALS.
											Males.	Females.	
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 and upwards.		Total over 5 Years
<i>Group 2.—Diseases of Organs of Special Sense.</i>													
(a) Eye—													
Ophthalmia Neonatorum	1	..	1	..	..	..	..	..	..	..	..	..	1
(b) Ear—													
Otorrhœa	..	..	..	3	2	..	..	..	..	..	..	..	4
<i>Group 3.—Diseases of the Circulatory System.</i>													
Heart Disease	1	..	1	3	8	11	19	23	39	39	14	2	158
Syncope	1	1	2	..	1	1	1	1	2	2	2	..	6
Endocarditis	..	..	..	..	1	1	..	..	..	1	..	..	3
Pericarditis	..	1	1	..	..	..	..	..	..	..	..	..	..
Aneurysm	..	..	..	..	1	2	1	3	..	..	..	..	7
Embolism	..	..	..	..	..	..	..	..	2	1	..	..	1
Angina Pectoris	..	..	..	..	..	..	..	..	..	..	..	..	2
Atheroma	..	..	..	..	..	..	..	..	..	1	..	..	1
<i>Group 4.—Diseases of the Respiratory System.</i>													
Bronchitis	44	19	63	2	2	6	8	20	39	33	2	..	112
Pneumonia	25	22	47	5	11	19	15	10	9	4	2	..	80
Pleurisy	..	..	..	..	..	..	..	1	2	..	..	..	3
Laryngitis	..	..	..	1	..	..	..	..	..	..	..	..	1
Croup	..	1	1	1	..	..	..	..	..	..	..	..	2
Asthma	..	..	..	..	..	..	..	1	1	1	..	..	3
Hæmoptysis	..	..	..	..	1	2	2	2	..	..	..	..	7
Empyema	..	..	..	..	2	1	..	..	..	..	..	..	3
Empysema	..	..	..	..	..	..	..	..	..	1	..	..	2
Œdema Glottidis	..	..	..	..	..	1	1	1	..	..	..	..	2

TABLE IX.—CONTINUED.

DISEASES CLASSIFIED.	AGES.												SEX.		TOTALS.		
													Males.	Females.			
	0 to 1	1 to 5	Total under 5 years.	5 to 15	15 to 25	25 to 35	35 to 45	45 to 55	55 to 65	65 to 75	75 to 85	85 to 95				95 and upwards.	Total over 5 Years
<i>Group 5.—Diseases of the Digestive System.</i>																	
Dentition ...	5	4	9	...	...	...	...	...	...	...	...	...	...	...	7	2	9
Tonsillitis ...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1	...	1
Gastritis ...	2	...	2	...	...	...	...	...	...	...	...	...	...	...	1	...	2
Gastro-Enteritis ...	17	4	21	...	1	...	...	...	...	...	...	...	...	...	11	13	24
Enteritis ...	8	2	10	1	...	...	...	...	...	...	...	...	...	...	9	5	14
Enter-Colitis ...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1
Appendicitis ...	...	...	...	3	1	...	...	...	...	...	...	...	...	...	2	2	4
Peritonitis ...	...	1	1	...	1	...	...	...	...	...	...	...	...	...	5	3	8
Hepatitis ...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	9	5	16
Cirrhosis of Liver ...	...	...	...	...	...	...	3	4	1	2	3	...	...	...	9	8	8
"Disease of Liver"	...	...	...	...	...	...	...	6	4	...	...	...	...	...	...	...	...
Jaundice ...	2	...	2	...	1	...	...	...	1	...	...	...	...	...	2	2	4
Ascites ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Intestinal Obstruction	1	1	2	...	1	1	1	1	2	1	1	...	...	...	2	2	3
Hernia ...	1	...	1	...	1	...	...	...	2	2	...	...	...	...	3	7	9
Intussusception ...	1	...	1	...	...	...	...	...	...	...	...	...	...	...	8	4	7
Hæmatemesis ...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1	...	1
Gastric Ulcer ...	...	...	...	...	...	...	...	...	1	...	...	...	...	...	1	...	1
Gall Stones ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Cyanache Trachealis	...	2	2	...	...	...	...	...	...	...	...	...	...	...	1	1	2
Stricture of Oesophagus	...	...	...	...	...	1	...	1	...	...	...	...	...	...	3	...	3
Constipation ...	...	1	1	...	...	...	...	...	...	...	...	...	...	...	...	1	1
<i>Group 6.—Diseases of the Lymphatic System and Ductless Glands.</i>																	
Addison's Disease ...	...	...	...	...	...	...	...	...	2	...	...	...	...	...	2	...	2

TABLE 10.

SHOWING MARRIAGE RATE, BIRTH RATE, DEATH RATE, ZYMOTIC DEATH RATE, AND INFANTILE MORTALITY FOR THE BOROUGH AND ITS VARIOUS DISTRICTS, FOR THE YEAR 1900.

District.	Marriage Rate.	Birth Rate.	Death Rate.	Zymotic Death Rate.	Infantile Mortality (Deaths under One Year per 100 Births registered).
Whole Borough	16.3	28.30	17.59	1.51	152.3
Town Proper	20.47	28.58	20.36	1.76	174.2
Portsmouth and Bitterne Park	8.68	27.65	12.97	1.31	109.5
Shirley, Freemantle and Millbrook	11.31	25.04	13.99	1.00	126.8

TABLE 11.

SHOWING NUMBER AND DESCRIPTION OF CASES OF INFECTIOUS DISEASE OCCURRING IN THIS BOROUGH NOTIFIED TO THE MEDICAL OFFICER OF HEALTH IN EACH OF THE FOUR QUARTERS OF 1900.

CASES IMPORTED BY VESSELS AND REMOVED FROM OTHER DISTRICTS FOR ISOLATION HAVE BEEN DEDUCTED FROM THIS TABLE.

DISEASES.	Quarter ending.				Total for Year.	Mortality for Year.
	March 31st	June 30th	Sept. 30th	Dec. 31st		
Small-Pox	—	11	—	—	11	—
Diphtheria	25	29	42	33	129	24
Membranous Croup ..	—	—	—	1	1	1
Erysipelas	15	16	14	18	63	5
Enteric or Typhoid Fever	19	10	33	24	77	13
Puerperal Fever	—	—	—	—	—	—
Scarlet Fever	57	35	70	61	223	2
Totals	1.7	101	159	137	504	45

TABLE 12.

SHOWING ALL DISEASES NOTIFIED DURING THE PAST NINE YEARS, AND THE NUMBER OF THEM ADMITTED TO HOSPITAL.

DISEASES.	1892.		1893.		1894.		1895.		1896.		1897.		1898.		1899.		1900.	
	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.	Notifications.	Admissions.
Small Pox ..	37	37	125	152*	17	18†	6	6	9	11	7	7	17	17	—	—	22	22
Cholera ..	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Diphtheria ..	10	—	51	1	39	—	39	—	50	—	53	—	145	3	190	—	133	54
Membranous	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Group	3	—	2	—	1	—	3	—	6	—	2	—	4	—	4	—	1	1
Erysipelas ..	40	—	109	—	63	—	53	—	82	—	53	—	41	—	76	—	64	—
Scarlet Fever ..	64	18	97	—	79	5	352	19†	906	26†	235	141	256	176	294	148	230	143
Typhoid Fever	82	17	107	—	78	2	59	—	79	—	68	1	169	—	184	—	116	52
Puerperal Fever	2	—	3	—	4	—	4	—	8	—	8	—	—	—	3	—	—	—
Measles ..	—	—	—	2	—	3	—	—	—	2	—	2	—	—	—	—	—	13
Lymphangitis..	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1
Total ..	238	72	494	156	281	29	516	204	1140	281	426	151	632	196	755	118	566	286

* Includes 27 cases admitted from outlying districts.

† 1 case

" " " " " "

" " " " " "

TABLE 13.

VACCINATION RETURNS FOR TOWN PROPER.

Years.	Births.	Successfully Vaccinated.	Died Unvaccinated.	Insusceptible to Vaccination.	Postponed and whereabouts unknown, or removed to other districts and exempt under Sec. 2 Vaccination Act, 1898.	Total.
1888	1710	1391	144	1	174	1710
1889	1660	1272	138	1	249	1660
1890	1585	1263	143	3	176	1585
1891	1714	1365	157	4	188	1714
1892	1646	1312	178	8	147	*1646
1893	1701	1391	173	17	115	1701
1894	1796	1484	181	30	101	1796
1895	1874	1552	205	17	100	1874
1896	1912	1570	231	18	93	1912
1897	1886	1566	194	15	111	1886
1898	1847	1471	213	19	144	1847
1899	1802	1391	240	12	159	1802

* One Child had Small Pox.

TABLE 14.

ABSTRACT FROM THE METEOROLOGICAL REGISTER KEPT AT THE ORDNANCE SURVEY OFFICE, SOUTHAMPTON,
DURING THE YEAR, 1900.

BAROMETER CORRECTED & REDUCED TO 32° AT MEAN SEA LEVEL.										TEMPERATURE.						RAINFALL.					RECORDED SUNSHINE.			REMARKS.
Month.	Mean at		Date.	Minimum Reading.	Date.	Mean at		Mean.		Approx. Maximum.	Date.	Lowest Minimum.	Date.	Total in Inches.	Greatest quantity in 24 hours.	Date.	No of days on which 0.1 or more fell.	Total No. of hours.	Maximum No. of hours.	Date.				
	9 a.m.	9 p.m.				Max. in Air.	Min. in Air.																	
January	29.953	29.939	30-498	Inch.	Inch.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	37.23	1.195	6	20	49.4	6.8	18, 25				
February	29.58	29.570	30-090	14	28-538	38.7	38.7	45.4	34.5	39.9	57.5	26	21.6	9	5.541	1.120	15	20	73.0	8.3	16			
March	31.021	30.023	30-690	13	29.264	40.5	39.1	47.2	34.5	40.8	58.6	2	23.9	18	1.172	0.382	19	10	80.6	8.6	17			
April	30.025	29.999	30-587	19	29.318	51.1	47.6	57.8	40.5	49.1	76.1	22	29.5	2	1.376	0.455	3	14	185.3	12.6	21, 21			
May	29.932	29.905	30-352	29	29.479	6	55.1	50.9	61.4	45.2	53.3	70.3	29	36.7	16	1.669	0.378	22	9	196.0	13.1	26		
June	29.958	29.942	30-171	1	29.472	25	62.4	58.4	69.2	52.2	60.7	81.3	12	47.7	5	2.861	0.617	22	18	202.3	13.4	12		
July	30.026	30.024	30-291	8	29.658	2	68.8	64.5	76.3	57.5	66.9	88.7	25	45.1	8	1.073	0.325	29	8	280.1	14.4	10		
August	29.979	29.968	30-410	13	29.427	6	64.1	60.3	71.4	54.4	62.9	85.2	14	49.9	11, 25	3.486	0.562	21	17	223.8	13.3	12, 13		
September	30.160	30.148	30-545	12	29.609	27	61.7	56.2	70.1	49.3	59.7	76.9	7	40.8	4	1.037	0.380	30	8	200.1	11.4	3		
October	30.018	30.010	30-603	22	29.353	26	52.8	51.0	59.7	45.2	52.4	68.4	8	36.3	22	2.370	0.520	4	16	118.8	9.0	3		
November	29.748	29.730	30-372	18	29.086	16	46.1	46.4	52.9	42.1	47.5	61.3	1	29.8	11	3.395	0.440	28	19	61.0	6.8	10		
December	29.962	29.942	30-542	16	29.656	30	45.9	47.0	51.5	42.3	46.9	56.8	22	31.9	22	3.921	1.010	30	21	25.8	6.0	21		
For the year	29.971	29.944	30-690	13	28-533	19	52.3	50.1	59.2	44.5	51.9	88.7	25	21.6	9	31.544	1.195	6	180	1696.2	14.4	10		
			Mar.		Feb.								Feb.			Jan.				Jan.		July		

This Table has been supplied by the courtesy of Col. DUNCAN A. JOHNSON, R.E., Director-General of Ordnance Survey.

APPENDIX B.—CONTENTS.

The Borough Analyst's Report for the Year ending
December 31st, 1900.

ANALYST'S DEPARTMENT.

ANNUAL REPORT

For the Year ending 31st DECEMBER, 1900.

*To the Worshipful The Mayor, Aldermen, and Councillors
of the County Borough of Southampton.*

GENTLEMEN,

I have the honour to submit for your information an account of the work done in this department during the past year.

SECTION I.

SALE OF FOOD AND DRUGS ACT, 1875.

The number of samples submitted under the above Act during the year 1900 was two hundred and sixty-three.

Of this number two hundred and eight samples were submitted by Inspectors, thirty-three privately, and twenty-two from the Borough of Newbury.

The character of the samples, the number of each article submitted, and the number and per centage of adulterated samples are given in the following table:—

TABLE I.

Character of Article.	Number of Samples.	Number of Samples Adulterated.	Per Centage of Adulterated Samples.
Baking Powder	2	—	—
Beer	26	—	—
Butter	68	5	7.35
Cream	2	—	—
Coffee	27	—	—
Flour	2	—	—
Lard	1	—	—
Margarine	2	—	—
Milk	124	15	12.00
„ Condensed	4	—	—
Oil, Olive	1	—	—
Sugar	1	—	—
Whiskey	2	1	50.00
Wine	1	—	—
Totals	263	21	7.99

The details as to the adulterated samples and the proceedings taken, and the result in each case, are given in Table II.

TABLE II.

Article Analysed.	No. on Register	Nature and Amount of Adulteration.	Proceedings taken.	Result.	
				Fine.	Costs.
Butter	104	Adulterated 75 % foreign fat	Summoned	20/-	13/-
"	122	" no butter fat.....	"	40/-	12/6
"	125	" " "	"	200/-	10/6
"	167	" " "	"	30/-	17/-
"	172	" " "	"	Dismissed	
Milk	29	" 43 % fat removed	"	10/-	10/6
"	51	" 2 % added water	none	—	—
"	86	" { 10 % fat removed	Summoned	10/-	8/6
"		" { 10 % added water		—	—
"	136	" 32 % added water	Test Sample	—	—
"	140	" 2 % " "	none	—	—
"	162	" 2 % " "	—	—	—
"	168	" 11 % " "	Summoned	100/-	11/6
"	8p.	" { 20 % " "	Private	—	—
"		" and oleum santali		—	—
"	12p.	" 10 % added water	"	—	—
"	13p.	" 6 % " "	"	—	—
"	15p.	" 6 % " "	"	—	—
"	24p.	" 2 % " "	"	—	—
"	25p.	" 10 % " "	"	—	—

The total fines and costs during the year amount to £24 13s. 6d.

The number of samples analysed during the year is fifty-three more than in 1899.

BUTTER.

Sixty-eight samples, or eight samples more than in 1899, were analysed, and five samples were adulterated.

These figures confirm the statement contained in last year's report "That the solitary sample found to be adulterated out of sixty samples" did not represent the actual condition as to the sale of adulterated butter.

By continued and careful watching some of the offenders who systematically sold an adulterated article in such a manner as to avoid detection, have been ultimately brought within the operation of the law and severely punished.

In the worst of these cases an attempt was made to wriggle out of the consequences.

A certificate from another analyst was put in which certified that the sample was genuine.

This the Magistrates did not accept, and fined the offender £10 and costs.

Subsequently the Analyst concerned applied to me for a sample of the butter I had analysed.

The portion retained by the Inspector was forwarded to him and also a similar sample in a second case against the same vendor (withdrawn), and in both cases he found the articles to be adulterated and confirmed your Analyst's certificate.

In this case also communication with the Board of Agriculture led to important assistance being received from their Inspector who traced the adulterated article from the manufacturer who sold it as margarine, to the Vendor who sold it as butter.

During the time dealers in this article were under surveillance by the Inspectors, a complaint was received through the Local Government Board from the Irish Butter Association, as to the sale of an adulterated article in Southampton contrary to the Margarine Act.

In the case of sample No. 172 the Magistrates dismissed the case on a technical point as to purchase. An appeal has, I understand, been entered against this decision.

MARGARINE.

Under the new Margarine Act it is not only an offence to sell margarine for butter, but it is also an offence to sell margarine containing more than ten per cent. of butter fat. Hence a butter may be adulterated and also not legally margarine, and it becomes necessary to state on the Certificate whether it is margarine, and also whether it is illegal margarine containing more than ten per cent. of butter fat.

MILK.

The number of samples analysed is one less than in the year 1900.

There is a marked decrease in the per cent. of adulterated samples during the year.

Per centage of adulterated samples :—

1896	1897	1898	1899	1900
5·43%	18·6%	20·16%	21·13%	12·03%

The increase in the per centage of adulterated samples is also at an end, and a considerable decrease has taken place since 1899.

Per centage of adulterated samples and their source :—

			Inspectors'.		Private.
1897	...	...	7·01%	...	23·08%
1898	...	...	13·02%	...	33·33%
1899	...	...	7·08%	...	61·29%
1900	...	...	7·95%	...	30·77%

COMPOSITION OF MILK SUPPLY.

The average composition of the milk has been higher than in any previous year. The composition of the samples returned as genuine was :—

Year	1897.		1898.		1899.		1900.	
	Inspectors	Private	Inspectors	Private	Inspectors	Private	Inspectors	Private
Total solids	12·71	12·19	12·56	12·33	12·72	12·93	12·91	12·66
Fat	3·92	3·54	3·87	3·60	4·00	4·15	4·30	3·95

The general average of genuine samples was :—

	1897	1898	1899	1900
Total solids ...	12·59%	12·50%	12·74%	12·09%
Fat ...	3·83%	3·79%	4·02%	4·24%

The average for adulterated samples for the three years 1898, 1899 and 1900 was :—

	1898.		1899.		1900.	
	Inspectors	Private	Inspectors	Private	Inspectors	Private
Total Solids ..	11·08	10·63	11·41	11·46	10·28	11·29
Fat	2·97	2·73	3·06	3·66	2·85	3·25

The accepted average total solids for genuine milk is 12·5% The general average quality of the milk supply of Southampton during 1900 was three-and-a-half per cent. above the accepted average. Although many of the samples returned as genuine are of extremely doubtful purity.

The remaining articles do not call for comment.

SECTION II.

GENERAL.

A.—*For Corporation.*

B.—*Private Analyses.*

A.

The various departments for which analyses, etc. have been made and the number and nature of the samples are given below, viz :—

BATHS COMMITTEE—

River Water	2
-------------	-----	-----	-----	-----	---

BOROUGH ENGINEER'S DEPARTMENT—

Mortar	5	}	7
Water...	2		

MEDICAL OFFICER'S DEPARTMENT—

Effluents	7	}	117
Experiments <i>re</i> Tip on Western Shore	...	...	...	2
Water	...	...	...	108

WATERWORKS DEPARTMENT—

Experiments <i>re</i> Waste	...	...	...	4	}	1011
Soap Solution	...	...	...	2		
Water for Hardness	...	...	...	1005		
Gas Examinations	...	...	...			4

Total						1141
-------	--	--	--	--	--	------

BATHS COMMITTEE.

The samples were examined to find the cause of the water turning muddy in appearance on passing steam into it and raising its temperature.

The change was found to be due largely to a rapid development of the vegetable germs, especially *algæ* and *confervæ*.

BOROUGH ENGINEER'S DEPARTMENT.

The samples of water submitted were for the information of Mr. Tyndale in connection with the enquiry he conducted for the Corporation.

The results in the case of the samples of mortar have been reported by Mr. Bennett to Committee, and dealt with.

MEDICAL OFFICER'S DEPARTMENT.

The water analysed for this department is from three sources, viz.:—The Borough Supply, the ships frequenting the port, and from wells.

The purity of the Borough supply has continued to be of the highest possible standard during the year. The softening has been carried out satisfactorily, both at Otterbourne and by the South Hants Company.

The supply from the latter source is, however, always more or less turbid. This turbidity is due to a varying quantity of calcium carbonate, precipitated in softening, remaining in suspension.

The samples from ships and wells the Medical Officer will deal with in his annual report.

WATERWORKS DEPARTMENT.

Experiments have been made during the year with the object of finding a use for the large quantity of precipitate obtained in softening. These experiments are at present in abeyance.

The average hardness of the water supply for 1900 is shewn below:—

SOURCE.	HARDNESS.		
	Highest.	Lowest.	Average.
Laboratory Tap ..	16.38°	3.00°	6.99°
Tap at Bitterne ..	14.66°	5.53°	8.73°
Tap at Shirley ..	11.37°	5.76°	8.34°

Total samples, etc., dealt with during the year 1900, were :

FOOD AND DRUGS—

Corporation ...	...	...	208
Private ...	...	...	33
Newbury ...	...	...	22—263

GENERAL ANALYSES, &c.—

Corporation ...	...	...	1141
Private ...	...	...	47—1188

Total for year	...	1451
----------------	-----	------

Fees received for private analyses	...	£68 18 6
------------------------------------	-----	----------

Fees outstanding on December 31st, 1900	£34 15 0
---	----------

I am, Gentlemen,

Your obedient servant,

J. BRIERLY,

Borough Analyst.

